

Storage Battery Manufacturing: 2002

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2002 Economic Census

Manufacturing

Industry Series



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U.S. Department of Commerce
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-- Not applicable for this report.

Table 1. Historical Statistics for the Industry: 2002 and Earlier Years

[Data based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). For information on confidentiality protection, sampling error, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Industry and year ¹	Com- panies ²	All estab- lish- ments ³	All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
			Number ⁴	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)				
335911, Storage battery manufacturing . . . 2002..	97	130	17 132	642 934	12 984	27 304	427 636	1 471 141	1 930 543	3 415 412	105 914
2001..	N	N	20 387	737 862	15 662	30 843	502 521	1 747 519	2 271 706	4 114 401	118 746
2000..	N	N	22 583	813 254	18 274	38 027	577 131	2 345 066	2 563 195	4 890 670	237 896
1999..	N	N	23 029	817 510	18 511	38 635	581 418	2 504 686	2 399 262	4 904 082	192 318
1998..	N	N	21 900	751 880	17 767	36 676	562 144	2 039 932	2 222 101	4 252 466	121 576
1997..	96	138	23 318	790 839	18 719	37 507	587 577	2 169 833	2 245 395	4 435 329	171 670

¹Statistics presented for years ending in 2 and 7 are census data. Interim census years are derived in a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures (ASM).

²For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

³Includes establishments with payroll at any time during the year.

⁴Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 2. Industry Statistics for Selected States: 2002

[States that are a disclosure or with less than 100 employees are not shown. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographical definitions, see note at end of table. For information on geographic areas followed by *, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

Industry and geographic area	E ¹	All establishments ²		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ³	Hours (1,000)	Wages (\$1,000)				
335911, Storage battery manufacturing												
United States	—	130	81	17 132	642 934	12 984	27 304	427 636	1 471 141	1 930 543	3 415 412	105 914
California	1	20	12	1 591	60 108	1 344	2 994	46 390	177 619	214 915	397 961	6 949
Illinois	—	10	4	632	21 743	486	955	14 323	71 704	89 193	163 519	5 095
Indiana	—	3	3	382	15 388	301	654	9 627	53 543	35 902	88 563	2 012
Ohio	—	5	3	784	28 356	622	1 425	21 600	67 710	108 767	176 866	5 211

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Includes establishments with payroll at any time during the year.

³Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C. For geographical definitions, see Appendix D.

Table 3. Detailed Statistics by Industry: 2002

[Data based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). For information on confidentiality protection, sampling error, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Item	Value
335911, Storage battery manufacturing	
Companies ¹	number.. 97
All establishments ²	number.. 130
Establishments with 1 to 19 employees	number.. 49
Establishments with 20 to 99 employees	number.. 35
Establishments with 100 employees or more	number.. 46
All employees ³	number.. 17 132
Total compensation	\$1,000.. 859 535
Annual payroll	\$1,000.. 642 934
Total fringe benefits	\$1,000.. 216 601
Production workers, average for year	number.. 12 984
Production workers on March 12	number.. 13 047
Production workers on May 12	number.. 13 021
Production workers on August 12	number.. 12 937
Production workers on November 12	number.. 12 906
Production worker hours	1,000.. 27 304
Production worker wages	\$1,000.. 427 636
Total cost of materials	\$1,000.. 1 930 543
Materials, parts, containers, packaging, etc., used	\$1,000.. 1 760 905
Resales	\$1,000.. 59 746
Purchased fuels	\$1,000.. 20 309
Purchased electricity	\$1,000.. 76 860
Contract work	\$1,000.. 12 723
Quantity of electricity purchased for heat and power	1,000 kWh.. 1 571 795
Quantity of electricity generated less sold for heat and power	1,000 kWh.. -
Total value of shipments	\$1,000.. 3 415 412
Primary products value of shipments	\$1,000.. 3 250 405
Secondary products value of shipments	\$1,000.. 86 679
Total miscellaneous receipts	\$1,000.. 78 328
Value of resales	\$1,000.. 72 486
Contract receipts	\$1,000.. D
Other miscellaneous receipts	\$1,000.. D
Primary products specialization ratio	percent.. 97
Value of primary products shipments made in all industries	\$1,000.. 3 285 546
Value of primary products shipments made in this industry	\$1,000.. 3 250 405
Value of primary products shipments made in other industries	\$1,000.. 35 141
Coverage ratio	percent.. 99
Value added	\$1,000.. 1 471 141
Total inventories, beginning of year	\$1,000.. 367 307
Finished goods inventories	\$1,000.. 158 155
Work-in-process inventories	\$1,000.. 105 315
Materials and supplies inventories	\$1,000.. 103 837
Total inventories, end of year	\$1,000.. 344 885
Finished goods inventories	\$1,000.. 143 422
Work-in-process inventories	\$1,000.. 106 320
Materials and supplies inventories	\$1,000.. 95 143
Gross value of depreciable assets (acquisition costs) at beginning of year	\$1,000.. 1 400 305
Total capital expenditures (new and used)	\$1,000.. 105 914
Buildings and other structures (new and used)	\$1,000.. 18 973
Machinery and equipment (new and used)	\$1,000.. 86 941
Automobiles, trucks, etc., for highway use	\$1,000.. 2 550
Computers and peripheral data processing equipment	\$1,000.. 4 492
All other expenditures for machinery and equipment	\$1,000.. 79 899
Total retirements	\$1,000.. 51 583
Gross value of depreciable assets at end of year	\$1,000.. 1 454 636
Depreciation charges during year	\$1,000.. 92 859
Total rental payments	\$1,000.. 22 223
Buildings and other structures	\$1,000.. 11 982
Machinery and equipment	\$1,000.. 10 241
Total other expenses ⁴	\$1,000.. 340 507
Response coverage ratio ⁵	percent.. 71
Repair and maintenance services of buildings and/or machinery ⁴	\$1,000.. 75 848
Communications services ⁴	\$1,000.. 3 622
Legal services ⁴	\$1,000.. 1 893
Accounting, auditing, and bookkeeping services ⁴	\$1,000.. 1 075
Advertising and promotional services ⁴	\$1,000.. 8 109
Expensed computer hardware and supplies and purchased computer services ⁴	\$1,000.. 3 934
Refuse removal (including hazardous waste) services ⁴	\$1,000.. 3 824
Management consulting and administrative services ⁴	\$1,000.. 8 277
Taxes and license fees ⁴	\$1,000.. 9 289
All other expenses ⁴	\$1,000.. 224 638

¹For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

²Includes establishments with payroll at any time during the year.

³Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

⁴Based on Annual Survey of Manufactures (ASM) sample data.

⁵A response coverage ratio is derived for this item by calculating the ratio of the weighted employment (establishment data multiplied by sample weight) for those Annual Survey of Manufactures (ASM) establishments that reported to the weighted total employment for all ASM establishments classified in this industry.

Note 1: The amounts shown for other expenses reflect only those services that establishments purchase from other companies.

Note 2: The data in this table are based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 4. Industry Statistics by Employment Size: 2002

[Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Employment size class	E ¹	All establishments ²	All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Number ³	Payroll (\$1,000)	Number ³	Hours (1,000)	Wages (\$1,000)				
335911, Storage battery manufacturing											
All establishments	—	130	17 132	642 934	12 984	27 304	427 636	1 471 141	1 930 543	3 415 412	105 914
Establishments with—											
1 to 4 employees	9	27	67	2 411	55	150	1 996	6 263	6 850	12 944	555
5 to 9 employees	7	13	85	3 358	68	142	2 318	8 645	9 329	18 064	690
10 to 19 employees	5	9	138	4 959	103	216	3 800	12 995	20 084	33 394	1 460
20 to 49 employees	2	21	683	24 813	468	1 154	12 319	57 437	70 327	126 531	5 809
50 to 99 employees	—	14	990	38 525	609	1 118	15 106	86 282	73 347	152 203	11 672
100 to 249 employees	1	23	3 511	127 332	2 722	5 785	86 689	373 554	398 523	774 629	21 870
250 to 499 employees	—	20	i	D	D	D	D	D	D	D	D
500 to 999 employees	—	2	g	D	D	D	D	D	D	D	D
1,000 to 2,499 employees	—	—	—	—	—	—	—	—	—	—	—
2,500 employees or more	—	1	h	D	D	D	D	D	D	D	D
Administrative records ⁴	9	40	204	7 485	178	373	6 205	19 620	21 749	41 110	1 916

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Includes establishments with payroll at any time during the year.

³Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

⁴Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. Data are also included in respective size classes shown.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C. For geographical definitions, see Appendix D.

Table 5. Industry Statistics by Primary Product Class Specialization: 2002

[Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Industry or product class code	Industry or primary product class	All establishments ¹	All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Number ²	Payroll (\$1,000)	Number ²	Hours (1,000)	Wages (\$1,000)				
335911	Storage battery manufacturing	130	17 132	642 934	12 984	27 304	427 636	1 471 141	1 930 543	3 415 412	105 914
3359111	Storage batteries, lead acid type, BCI dimensional size group 8D (1.5 cu ft (.042 cu m) and smaller)	34	11 282	419 774	8 813	18 751	296 996	867 860	1 424 792	2 319 274	62 706
3359114	Storage batteries, lead acid type, larger than BCI dimensional size group 8D (1.5 cu ft (.042 cu m)) ...	25	3 743	143 294	2 877	6 038	94 072	431 094	314 436	740 473	26 755
3359117	Storage batteries (except lead acid), including parts for all storage batteries	18	1 383	46 748	843	1 618	20 776	121 109	141 228	260 360	6 838

¹Includes establishments with payroll at any time during the year.

²Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 6a. Products Statistics: 2002 and 1997

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Product code	Product	Number of companies with shipments of \$100,000 or more	Quantity of production for all purposes	Product shipments	
				Quantity	Value (\$1,000)
335911	Storage battery manufacturing	2002.. N 1997.. N	X X	X X	3 285 546 4 290 400
3359111	Storage batteries, lead acid type, BCI dimensional size group 8D (1.5 cu ft (.042 cu m) and smaller)	2002.. N 1997.. N	X X	X X	2 087 453 2 857 009
33591111	Starting, lighting, and ignition (SLI) type lead acid storage batteries for original equipment, BCI dimensional size group 8D (1.5 cu ft (.042 cu m) and smaller)	2002.. N 1997.. N	X X	X X	D D
3359111101	Starting, lighting, and ignition (SLI) type lead acid storage batteries for original equipment, BCI dimensional size group 8D (1.5 cu ft (.042 cu m) and smaller)	2002.. 13 1997.. 15	X X	X X	D D
33591112	Starting, lighting, and ignition (SLI) type lead acid storage batteries for replacement, BCI dimensional size group 8D (1.5 cu ft (.042 cu m) and smaller)	2002.. N 1997.. N	X X	X X	1 185 788 1 918 990
335911204	Starting, lighting, and ignition (SLI) type lead acid storage batteries for replacement, BCI dimensional size group 8D (1.5 cu ft (.042 cu m) and smaller)	2002.. 13 1997.. 18	X X	X X	1 185 788 1 918 990
33591113	Lead acid storage batteries other than (SLI) type, BCI dimensional size group 8D (1.5 cu ft (.042 cu m) and smaller)	2002.. N 1997.. N	X X	X X	D D
3359111307	Lead acid storage batteries other than (SLI) type, BCI dimensional size group 8D (1.5 cu ft (.042 cu m) and smaller)	2002.. 4 1997.. 5	X X	D X	D D
3359111Y	Storage batteries, lead acid type, BCI dimensional size group 8D (1.5 cu ft (.042 cu m) and smaller), nsk	2002.. N 1997.. N	X X	X X	— 19 082
3359111YVW	Storage batteries, lead acid type, BCI dimensional size group 8D (1.5 cu ft (.042 cu m) and smaller), nsk	2002.. N 1997.. N	X X	X X	— 19 082
3359114	Storage batteries, lead acid type, larger than BCI dimensional size group 8D (1.5 cu ft (.042 cu m))	2002.. N 1997.. N	X X	X X	863 022 946 840
33591141	Motive power type lead acid storage batteries, larger than BCI dimensional size group 8D (1.5 cu ft (.042 cu m)), including mining and industrial locomotive	2002.. N 1997.. N	X X	X X	365 589 407 401
3359114101	Motive power type lead acid storage batteries for industrial trucks, larger than BCI dimensional size group 8D (1.5 cu ft (.042 cu m) and smaller)	2002.. 8 1997.. 11	X X	X X	307 846 363 447
3359114104	All other motive power type lead acid storage batteries, including mining and industrial locomotive, larger than BCI dimensional size group 8D (1.5 cu ft (.042 cu m) and smaller)	2002.. 6 1997.. 7	X X	X X	57 743 43 954
33591142	All other lead acid storage batteries, larger than BCI dimensional size group 8D (1.6 cu ft (.042 cu m))	2002.. N 1997.. N	X X	X X	497 433 536 283
3359114201	Communication lead acid storage batteries (central office telephone supervisory equipment, telemetering, and microwave), larger than BCI dimensional size group 8D (1.5 cu ft (.042 cu m) and smaller)	2002.. 8 1997.. 7	X X	X X	208 886 183 005
3359114204	Standby emergency power lead acid storage batteries, larger than BCI dimensional size group 8D (1.5 cu ft (.042 cu m) and smaller)	2002.. 9 1997.. 9	X X	X X	211 251 257 587
3359114207	All other lead acid storage batteries, larger than BCI dimensional size group 8D (1.5 cu ft (.042 cu m) and smaller), including starting, lighting, and ignition (SLI type)	2002.. 9 1997.. 9	X X	X X	77 296 95 691
3359114Y	Storage batteries, lead acid type, larger than BCI dimensional size group 8D (1.5 cu ft (.042 cu m)), nsk	2002.. N 1997.. N	X X	X X	— 3 156
3359114YVW	Storage batteries, lead acid type, larger than BCI dimensional size group 8D (1.5 cu ft (.042 cu m)), nsk	2002.. N 1997.. N	X X	X X	— 3 156
3359117	Storage batteries (except lead acid), including parts for all storage batteries	2002.. N 1997.. N	X X	X X	262 829 384 917
33591171	Storage batteries (except lead acid), including parts for all storage batteries	2002.. N 1997.. N	X X	X X	251 378 D
3359117101	Nickel cadmium storage batteries (sealed or vented)	2002.. 14 1997.. 11	X X	X X	125 852 D
3359117104	Storage batteries other than nickel cadmium or lead acid	2002.. 10 1997.. 5	X X	X X	125 526 D
33591172	Parts for all storage batteries, excluding cases and containers	2002.. N 1997.. N	X X	X X	11 451 D
3359117201	Parts for all storage batteries, excluding cases and containers	2002.. 5 1997.. 4	X X	X X	11 451 D
3359117Y	Storage batteries (except lead acid), including parts for all storage batteries, nsk	2002.. N 1997.. N	X X	X X	— 5 572
3359117YVW	Storage batteries (except lead acid), including parts for all storage batteries, nsk	2002.. N 1997.. N	X X	X X	— 5 572
335911W	Storage battery manufacturing, nsk, total	2002.. N 1997.. N	X X	X X	72 242 101 634

See footnotes at end of table.

Table 6a. **Products Statistics: 2002 and 1997—Con.**

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Product code	Product	Number of companies with shipments of \$100,000 or more	Quantity of production for all purposes	Product shipments	
				Quantity	Value (\$1,000)
335911	Storage battery manufacturing—Con.				
335911W	Storage battery manufacturing, nsk, total—Con.				
335911WY	Storage battery manufacturing, nsk, total	N	X	X	72 242
	1997 ..	N	X	X	101 634
335911WYWW	Storage battery manufacturing, nsk, for nonadministrative-record establishments	N	X	X	34 401
	2002 ..	N	X	X	71 502
	1997 ..	N	X	X	37 841
335911WYWY	Storage battery manufacturing, nsk, for administrative-record establishments	N	X	X	30 132
	2002 ..	N	X	X	
	1997 ..	N	X	X	

Note 1: For some establishments, data have been estimated from central unit values that are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: p—10 to 19 percent estimated; q—20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by S.

Note 2: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 6b. Product Class Shipments for Selected States: 2002 and 1997

[Product classes covered are those that are economically significant and whose production is geographically dispersed, provided dispersion is not approximated by data in Table 2. Also, product classes are not shown if they are miscellaneous or "not specified by kind" classes. Statistics for some states are withheld because they are either less than \$2 million in product class shipments or they disclose data for individual companies in 2002. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographic definitions, see note at end of table. For information on geographic areas followed by *, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

NAICS product class code	Product class and geographic area	Value of product shipments (\$1,000)
3359111	Storage batteries, lead acid type, BCI dimensional size group 8D (1.5 cu ft (.042 cu m) and smaller)	
	United States..... 2002..	2 087 453
	..... 1997..	2 857 009
	California 2002..	282 513
	..... 1997..	322 325
3359114	Storage batteries, lead acid type, larger than BCI dimensional size group 8D (1.5 cu ft (.042 cu m))	
	United States..... 2002..	863 022
	..... 1997..	946 840
	California 2002..	63 333
	..... 1997..	20 473
3359117	Storage batteries (except lead acid), including parts for all storage batteries	
	United States..... 2002..	262 829
	..... 1997..	384 917
	California 2002..	30 255
	..... 1997..	N

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C. For geographical definitions, see Appendix D.

Table 7. Materials Consumed by Kind: 2002 and 1997

[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Material code	Material consumed	Quantity	Delivered cost (\$1,000)
335911	Storage battery manufacturing		
00900001	Total materials .....2002..	X	1 760 905
	.....1997..	X	2 077 507
332000AC	Metal stampings .....2002..	X	5 506
	.....1997..	X	10 168
33200073	All other fabricated metal products (excluding forgings, castings, and metal stampings) .....2002..	X	33 123
	.....1997..	X	61 438
33210000	Forgings .....2002..	X	D
	.....1997..	N	N
33100035	Castings, rough and semifinished .....2002..	X	2 005
	.....1997..	N	N
33141951	Refined unalloyed lead shapes and forms (excluding castings, forgings, and fabricated metal products) .....2002..	X	370 678
	.....1997..	X	434 281
33141953	Antimonial lead .....2002..	X	272 841
	.....1997..	X	276 636
33141955	Lead-calcium alloyed .....2002..	X	147 365
	.....1997..	X	198 170
33120016	Steel sheet and strip (including tinplate) .....2002..	X	D
	.....1997..	N	N
33120030	All other steel shapes and forms (excluding castings, forgings, and fabricated metal products) .....2002..	X	2 674
	.....1997..	N	N
33149104	Zinc and zinc-base alloy shapes and forms (excluding castings, forgings, and fabricated metal products) .....2002..	X	D
	.....1997..	N	N
32513105	Litharge .....2002..	X	24 594
	.....1997..	X	58 730
32518802	Sulfuric acid, new and spent (100 percent H2SO4) .....2002..	X	29 092
	.....1997..	N	N
325000B3	Other industrial inorganic chemicals (including mercury oxide and silver oxide) .....2002..	X	14 761
	.....1997..	X	49 617
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc. ....2002..	X	17 245
	.....1997..	X	D
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes .....2002..	X	74 278
	.....1997..	X	71 993
32610011	Fabricated plastics products (excluding gaskets) .....2002..	X	218 296
	.....1997..	X	260 684
32221001	Paperboard containers, boxes, and corrugated paperboard .....2002..	X	38 193
	.....1997..	X	D
33599101	Carbon and graphite electrodes, and other carbon and graphite products for electrical use .....2002..	X	D
	.....1997..	X	462
331000AA	Metal powders .....2002..	X	45 029
	.....1997..	N	N
00970099	All other materials and components, parts, containers, and supplies .....2002..	X	304 426
	.....1997..	X	456 123
00971000	Materials, ingredients, containers, and supplies, nsk .....2002..	X	143 858
	.....1997..	X	130 650

Note 1: For some establishments, data have been estimated from central unit values that are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: p-10 to 19 percent estimated; q-20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by S.

Note 2: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.